



**Figure W-14—Typical frame configuration.**

(4) For overhead protection requirements, see § 1926.1003.

(5) If protective enclosures are used on wheel-type agricultural and industrial tractors, they shall meet the requirements of Society of Automotive Engineers Standard J168 (July 1970), Protective Enclosures, Test Procedures, and Performance Requirements. This standard appears in the 1971 SAE Handbook and may be examined in each Regional Office of the Occupational Safety and Health Administration.

(b) *Applicability.* The requirements of this section apply to wheel-type agricultural tractors used in construction work and to wheel-type industrial tractors used in construction work. See paragraph (j) of this section for definitions of agricultural tractors and industrial tractors.

(c)—(i) [Reserved]

(j) *Definitions applicable to this section.*

(1) SAE J333a, Operator Protection for Wheel-Type Agricultural and Industrial Tractors (July 1970) defines *agricultural tractor* as a “wheel-type vehicle of more than 20 engine horsepower designed to furnish the power to pull, carry, propel, or drive implements that are designed for agricultural usage.” Since this Part 1926 applies only to construction work, the following definition of “agricultural tractor” is adopted for purposes of this subpart: “Agricultural tractor” means a wheel-type vehicle of more than 20 engine horsepower, used in construction work, which is designed to furnish the power to pull, propel, or drive implements.

(2) *Industrial tractor* means that class of wheeled type tractor of more than 20 engine horsepower (other than rubber-tired loaders and dozers described in § 1926.1001), used in operations such as landscaping, construction services,

loading, digging, grounds keeping, and highway maintenance.

[44 FR 8577, Feb. 9, 1979; 44 FR 20940, Apr. 6, 1979, as amended at 61 FR 9251, Mar. 7, 1996]

**§ 1926.1003 Overhead protection for operators of agricultural and industrial tractors.**

(a) *General*—(1) *Purpose.* When overhead protection is provided on wheel-type agricultural and industrial tractors, the overhead protection shall be designed and installed according to the requirements contained in the test and performance requirements of Society of Automotive Engineers Standard J167-1970, Protective Frame with Overhead Protection-Test Procedures and Performance Requirements, which pertains to overhead protection requirements and is incorporated by reference. The incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the Society of Automotive Engineers, 485 Lexington Avenue, New York, NY 10017. Copies may be inspected at the OSHA Docket Office, U.S. Department of Labor, 200 Constitution Ave., NW., Room N2634, or at the Office of the Federal Register, 800 North Capitol St., NW., Suite 700, Washington, D.C. The standard also appears in the 1971 SAE Handbook, which may be examined in each of OSHA's Regional Offices. The provisions of § 1926.1001 for rubber-tired dozers and rubber-tired loaders may be used in lieu of the standards contained in this section. The purpose of the standard is to minimize the possibility of operator injury resulting from overhead hazards such as flying and falling objects, and at the same time to minimize the possibility of operator injury from the cover itself in the event of accidental upset.

(2) *Applicability.* This standard applies to wheel-type agricultural tractors used in construction work and to wheel-type industrial tractors used in construction work. See § 1926.1002 (b) and (j). In the case of machines to which § 1926.604 (relating to site clearing) also applies, the overhead protection may be either the type of protection provided in § 1926.604 or the type of protection provided by this section.

(b) *Overhead protection.* When overhead protection is installed on wheel-type agricultural or industrial tractors used in construction work, it shall meet the requirements of this paragraph. The overhead protection may be constructed of a solid material. If grid or mesh is used, the largest permissible opening shall be such that the maximum circle which can be inscribed between the elements of the grid or mesh is 1.5 in. (38 mm.) in diameter. The overhead protection shall not be installed in such a way as to become a hazard in the case of upset.

[44 FR 8577, Feb. 9, 1979; 44 FR 20940, Apr. 6, 1979, as amended at 61 FR 9251, Mar. 7, 1996]

## Subpart X—Stairways and Ladders

AUTHORITY: Section 107, Contract Work Hours and Safety Standards Act (Construction Safety Act) (40 U.S.C. 333); Secs. 4, 6, 8, Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order No. 1-90 (55 FR 9033); and 29 CFR part 1911.

SOURCE: 55 FR 47687, Nov. 14, 1990, unless otherwise noted.

### § 1926.1050 Scope, application, and definitions applicable to this subpart.

(a) *Scope and application.* This subpart applies to all stairways and ladders used in construction, alteration, repair (including painting and decorating), and demolition workplaces covered under 29 CFR part 1926, and also sets forth, in specified circumstances, when ladders and stairways are required to be provided. Additional requirements for ladders used on or with scaffolds are contained in subpart L—Scaffolds

(b) *Definitions.* *Cleat* means a ladder crosspiece of rectangular cross section placed on edge upon which a person may step while ascending or descending a ladder.

*Double-cleat ladder* means a ladder similar in construction to a single-cleat ladder, but with a center rail to allow simultaneous two-way traffic for employees ascending or descending.

*Equivalent* means alternative designs, materials, or methods that the employer can demonstrate will provide an equal or greater degree of safety for

employees than the method or item specified in the standard.

*Extension trestle ladder* means a self-supporting portable ladder, adjustable in length, consisting of a trestle ladder base and a vertically adjustable extension section, with a suitable means for locking the ladders together.

*Failure* means load refusal, breakage, or separation of component parts. Load refusal is the point where the structural members lose their ability to carry the loads.

*Fixed ladder* means a ladder that cannot be readily moved or carried because it is an integral part of a building or structure. A *side-step fixed ladder* is a fixed ladder that requires a person getting off at the top to step to the side of the ladder side rails to reach the landing. A *through fixed ladder* is a fixed ladder that requires a person getting off at the top to step between the side rails of the ladder to reach the landing.

*Handrail* means a rail used to provide employees with a handhold for support.

*Individual-rung/step ladders* means ladders without a side rail or center rail support. Such ladders are made by mounting individual steps or rungs directly to the side or wall of the structure.

*Job-made ladder* means a ladder that is fabricated by employees, typically at the construction site, and is not commercially manufactured. This definition does not apply to any individual-rung/step ladders.

*Ladder stand.* A mobile fixed size self-supporting ladder consisting of a wide flat tread ladder in the form of stairs. The assembly may include handrails.

*Lower levels* means those areas to which an employee can fall from a stairway or ladder. Such areas include ground levels, floors, roofs, ramps, runways, excavations, pits, tanks, material, water, equipment, and similar surfaces. It does not include the surface from which the employee falls.

*Maximum intended load* means the total load of all employees, equipment, tools, materials, transmitted loads, and other loads anticipated to be applied to a ladder component at any one time.